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U.S. ENVIRONMENTAL PROTECTION AGENCY REGION 10

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The U.S. Environmental Protection Agency (EPA) will soon begin treating contaminated soil at the Alexander Farms Site. This fact sheet describes the thermal desorber unit which will be used at the site and gives an estimated schedule of the activities that will take place over the next several months.

Background

In April 1998, investigators found soil and groundwater contamination at the Alexander Farms property after two private drinking water wells in the vicinity were identified with high levels of dinoseb, a herbicide banned in 1986. Both of the private wells were properly abandoned. The Washington Department of Ecology (Ecology) ordered the owner of Alexander Farms to take several immediate actions, including the removal of contaminated soil. While some actions were taken, the contaminated soil was not removed. Ecology became concerned that contamination would continue to be released to the drinking water aquifer below the site and requested assistance from EPA. An aquifer is an underground zone of soil that is saturated with water. This water is often called "groundwater."

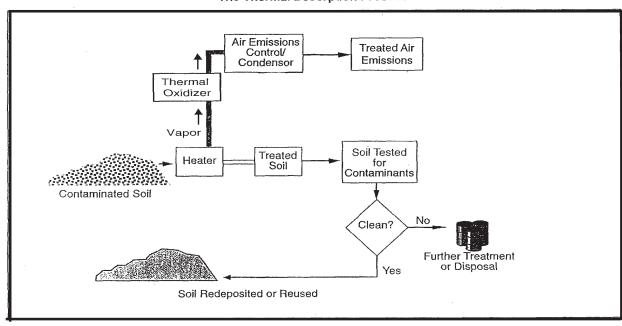
EPA evaluated the site and determined that a potential threat to human health and the environment existed from prolonged exposure to contaminated water and immediate action was necessary to minimize that threat. EPA and its contractors excavated approximately 12,200 tons of contaminated soil. The more highly contaminated soil (6,300 tons) was stored onsite in two buildings, with a smaller pile stored on a concrete pad and covered with a tarp to protect it from the weather. This soil will be treated using thermal desorption. The less contaminated soil was taken to a landfill for proper disposal.

EPA is using authorities and funding provided by the federal Superfund law to conduct the necessary immediate cleanup activities. Additional investigations and further cleanup activities may be necessary following the completion of this phase of work.

The Thermal Desorber

Thermal desorption treats contaminated soils by heating the soil to temperatures around 650 degrees so that contaminants will vaporize and separate from the soil. The thermal desorber unit that will be used for this site will collect the vapor and treat it using a thermal oxidizer which will operate at about 1800 degrees to destroy any contaminants in the vapor.

The Thermal Desorption Process



EPA and its contractors have begun assembling the thermal desorber. Test runs are scheduled to begin the week of July 19th. The tests will consist of a controlled and constantly monitored heating of contaminated material to ensure that the desorber is operating effectively. Full scale treatment of contaminated soil is scheduled to begin about August 23rd. The treatment unit will run continually until all the contaminated soil has been treated. EPA plans to complete soil treatment by approximately the middle of September, 1999.

Groundwater Contamination

The property owner has submitted a report on the on-going groundwater investigation at the site. The report includes the results from water sample analyses, a site history, the site geology, a description of the extent of Dinoseb contamination in the aquifers under the site, and a computer groundwater model. Although Dinoseb contamination has been measured as high as 1,200 parts per billion in an underlying aquifer (May 1999), it does not appear to be leaving the property at levels exceeding the EPA drinking water standard of 7 parts per billion. If you have any questions about the Groundwater Contamination report, please contact **Tom Mackie** at the Washington Department of Ecology **(509) 454-7834**.

For More Information

EPA has completed the Community Relations Plan for this site. If you would like to review this, or any other document related to the Alexander Farms site, please visit the information repository at the Grandview Library, 311 Division Street in Grandview, Washington.

If you have any questions, please contact one of the people listed below:

Krista Rave, EPA Outreach Coordinator, at (206) 553-6686 or toll free at 1-800-424-4372.

Anthony Barber, EPA On-Scene Coordinator, at (206) 553-2136 or toll free at 1-800-424-4372.

To ensure effective communication with everyone, additional services can be made available to persons with disabilities by contacting EPA toll free at 1-800-424-4372.



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